Claims

Sub a1

1 Apparatus for the transmittal, reception, storage and display of data in an electronic format in which there is provided a casing that includes a data storage means, a data display means, and a data transmission/reception means including at least one output/input port,and wherein the data transmission/reception means includes means for decrypting received data and placing it in the data storage means, encrypting and transmitting data from the data storage means and means for storing at least one encryption key, and characterised in that the apparatus is configured such that one encryption key references addresses in a portion of Read Only Memory forming part of the apparatus, and so that the content of those addresses is used to encrypt/decrypt transmitted/received data.

2 Apparatus according to claim 1 in which at least one encryption/decryption key is stored in a portion of either Electronically Erasable Programable Read Only Memory or non volatile Random Access Memory, and may be rewritten by an external key issuing computer.

3 Apparatus according to claim 2 in which at least one encryption key is 16 bytes in size.

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4 Apparatus according to any one of claims 1 to 3 in which the Read Only Memory is at least 256 bytes in size.

5 Apparatus according to any one of claims 1 to 4 in which the data storage means is comprised of non volatile Random Access Memory.

6 Apparatus according to any one of claims 1 to 5 in which an output/input port is adapted to connect with a telephone socket via an electromagnetic radiation link.

7 Apparatus according to any one of claims 1 to 6 in which the display means includes a display screen and computer hardware and software to enable presentation of the data in graphical and/or textual form.

8 A method of using apparatus according to any one of claims 1 to 7 for the reception of electronic data from an external data source characterised in that:

i) the apparatus enters into electronic communication with the data source and sends an identification code to the data source,

ii) the data source confirms the identity of the apparatus and thereby determines what encryption key to use in communicating with the apparatus,

iii) the apparatus sends a code to the data source identifying the data to be received by the apparatus,

iv) the data source transmits the identified data in encrypted form to the apparatus which decrypts that data and places it in the data storage means,

v) the data source transmits a new encryption key to the apparatus, which key overwrites the previous encryption key, and

vi) the communication between the apparatus and the data source is broken.

9 A method according to claim 8 in which the means of electronic communication between the apparatus and the data source is via the telephone network.

10 A method according to claim 8 in which the means of electronic communication between the apparatus and the data source is via the internet.

11 A method according to any one of claims 8 to 10 in which the electronic data is electronically stored text and/or graphics.

12 A method of using apparatus according to any one of claims 1 to 7 for the transfer of electronic data between the apparatus and an external data store characterised in that:

i) the apparatus enters into electronic communication with the data store which sends an identification code to the apparatus,

ii) the apparatus confirms the identity of the data store and thereby determines what data store encryption key to use in communicating with the data store,

iii) the apparatus causes the transfer of preselected data between the apparatus and the data store in encrypted form,

iv) the receiver of the encrypted data decrypts that data and stores it,

v) the apparatus transmits a new data store encryption key to the data store, which key overwrites the previous data store encryption key, and

vi) the communication between the apparatus and the data store is broken.

13 A method of using apparatus according to any one of claims 1 to 7 for the transfer of electronic data between the apparatus and an external data store characterised in that:

i) the apparatus enters into electronic communication with the data store,

ii) the apparatus causes the transfer of preselected data between the apparatus and the data store in encrypted form,

iii) the receiver of the data stores the data, and

iv) the communication between the apparatus and the data store is broken.

14 A method according to claim 13 in which the electronic data is transmitted from the data store to the apparatus, and is saved in the apparatus in decrypted form.

15 A method according to claim 13 in which the electronic data is transmitted from the apparatus to the data store, and is saved in the data store in encrypted form, the encryption key being a permanent encryption key for that data held in the apparatus.

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16 A method according to any one of claims 12 to 15 in which the data store will on interrogation by the apparatus, provide the apparatus with a list of the data stored within the data store.

17 A method according to any one of claims 12 to 16 in which the means of electronic communication between the apparatus and the data store is via electrical or optical cable.

18 A method according to any one of claims 12 to 16 in which the means of electronic communication between the apparatus and the data store is via electromagnetic radiation.

19 A method according to anyone of claims 12 to 18 in which the electronic data is electronically stored text and/or graphics.

AMENDED SHEET